

DETERMINING AND EXPRESSING DATA RELIABILITY

TECHNICAL FIELD

[0001] This specification relates generally to determining the reliability of data and to expressing the reliability of that data graphically.

BACKGROUND

[0002] In the context of data, reliability may be a measure of the extent to which the data is accurate or can be trusted. A report, for example, may contain multiple data elements having varying degrees of reliability.

SUMMARY

[0003] Example processes may include the following operations. Confidence scores may be obtained for different components used to determine an estimate. A confidence score for a component may be based, at least in part, on a reliability of the component over a specified period of time. The confidence scores may be weighted to produce weighted confidence scores. Each of the confidence scores may be weighted based on a perceived importance of each of the different components to the estimate. A confidence index may be produced for the estimate based, at least in part, on a combination of the weighted confidence scores. The confidence index may correspond to a reliability of the estimate. Data may be generated that is used to render a graphical user interface (GUI) on a display screen of a computing system. The GUI may display the estimate and the confidence index for the estimate, and the GUI may highlight the estimate graphically. Computer-generated graphics that highlight the estimate on the GUI may be based on the confidence index. The data may be output to render the GUI on the display screen of the computing system. The example processes may include one or more of the following operations, either alone or in combination.

[0004] The example processes may include combining the weighted confidence scores by adding the weighted confidence scores together. A confidence score for at least one component may be generated programmatically based on historical data for the at least one component. The confidence score for at least one component may be generated without user intervention.

[0005] The different components may include different types of components. The different types of components may include a quality component, a class component, a source component, an aging component, and a completeness component. The quality component may be based on an origin of data upon which the estimate is based. The class component may be based on an identity of an entity that the estimate is for. The source component may be based on an identity of a source providing information upon which the estimate is based. The completeness component may indicate whether additional information is required or not required for the estimate. The different components may also include a component that is based on an age of the entity that the estimate is for. The age of the entity may correspond to or be based on a date that the entity was last evaluated.

[0006] The computer-generated graphics may include colors that change based on the confidence index. The estimate may be highlighted using a color that is based on the confidence index. Information associated with the estimate,

such as trailing values, may be also highlighted using the color or a different color that represents a different confidence index. The information associated with the estimate may include trailing values relating to an entity that the estimate is for. The trailing values may be arranged in tabular format. The estimate and the trailing values may be arranged in a row of a table. The row may be highlighted in the color.

[0007] The estimate may be part of a portfolio that includes multiple estimates. The processes may include producing a confidence index for the portfolio based, at least in part, on a combination of the multiple estimates. The GUI may display the confidence index for the portfolio graphically.

[0008] The GUI may be configurable to specify a period of time for which the confidence index is generated. The confidence scores may be obtained for the period of time specified in the GUI such that the confidence index corresponds to the period of time. The estimate may be for an investment and the GUI may include a performance report containing the estimate and other information about the investment. A portion of the performance report containing the estimate may contain the computer-generated graphics to highlight the portion in a color that is based on the confidence index. The GUI may include a performance report that contains a beginning market value for the investment and a current market value for the estimate. At least one of the beginning market value for the investment and the current market value for the estimate may be highlighted by the computer-generated graphics in one or more colors that are based on the confidence index. The estimate may relate to performance of a manager of an investment portfolio.

[0009] The GUI may be configured to accept a user-defined component and information relating to the user-defined component. Display of the computer-generated graphics may be controllable through the GUI. The GUI may be configured to provide, in response to selecting of an on-screen component, at least one of information about background calculations or information about the different components that are used to produce the confidence index.

[0010] Any two or more of the features described in this specification, including in this summary section, may be combined to form implementations not specifically described in this specification.

[0011] All or part of the processes, methods, systems, and techniques described herein may be implemented as a computer program product that includes instructions that are stored on one or more non-transitory machine-readable storage media, and that are executable on one or more processing devices. Examples of non-transitory machine-readable storage media include, for example, read-only memory, an optical disk drive, memory disk drive, random access memory, and the like. All or part of the processes, methods, systems, and techniques described herein may be implemented as an apparatus, method, or system that includes one or more processing devices and memory storing instructions that are executable by the one or more processing devices to perform the stated operations.

[0012] The details of one or more implementations are set forth in the accompanying drawings and the description below. Other features and advantages will be apparent from the description and drawings, and from the claims.